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EXAMINER

COSIMANO, EDWARD R

ART UNIT	PAPER NUMBER
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3629

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/759,649

Applicant(s)

SUEN ET AL

Examiner

Edward R. Cosimano

Art Unit

3629

**Period for Reply**  
The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) none is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1. Applicant should note the changes to patent practice and procedure:
  - A) effective December 01, 1997 as published in the Federal Register, Vol 62, No. 197, Friday October 10, 1997;
  - B) effective November 07, 2000 as published in the Federal Register, Vol 65, No. 54603, September 08, 2000; and
  - C) Amendment in revised format, Vol. 1267 of the Official Gazette published February 25, 2003.
2. Applicant's claim for the benefit of an earlier filing data under 35 U.S.C. § 119(e) is acknowledged.
3. The drawings are objected to because
  - A) the following errors have been noted in the drawings:
    - (1) The drawings are objected to as failing to comply with 37 CFR § 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description, note:
      - (a) reference legend 100 as disclosed in the paragraph located:
        - (1) at page 7, lines 11-21, "Figure 1 is a block diagram of a general purpose computer system 100 suitable ... invention. Computer system 100, made up of various subsystems ... of input data, and the output and display of data on output devices.";
        - (2) between page 8, line 14, and page 9, line 4, "A removable mass storage device 112 provides additional data storage capacity for the computer system 100, and is ... standard fashion as part of primary storage 110 (e.g. RAM) as virtual memory.";
        - (3) between page 9, line 12, and page 10, line 4, "The network interface 116 allows CPU 102 to be coupled ... to connect the computer system 100 to an external network ... through network interface 116."; and

(4) at page 10, lines 5-10, "An auxiliary I/O device interface (not shown) can be used in conjunction with computer system 100. The auxiliary ... mass storage devices, and other computers."

(2) the drawings lack fig. 4 as disclosed in the paragraph located:

(a) at page 13, lines 14-21, "The total amount of ink ... conjunction with Figures 4-6. A price is then displayed (step 212)."; and

(b) at page 17, lines 7-21, "Figure 6 is a flow diagram ... described in conjunction with Figures 2-5."

(3) The drawings are objected to as failing to comply with 37 CFR § 1.84(p)(4) because reference character "600", "602" and "604" have been used to designate different flow steps in figs. 5 & 6, see the paragraphs located:

(a) at page 16, lines 12-19, "Figure 5 is a flow diagram of a method according to an embodiment of the present invention for determining a cost multiplier for a particular color ink cartridge. An IC value is computed for a test document (step 600). The IC value can be computed as in step 502 of Figure 4A. The test document can be printed on a particular printer until the printer runs out of an ink cartridge (step 602). How much IC is associated with that ink cartridge for that particular printer can be derived (604). The cost of that ink cartridge is then divided by the IC of the ink cartridge to get the cost multiplier for that ink color for that specific printer (step 606)."; and

(b) at page 17, lines 7-21, "Figure 6 is a flow diagram of a method according to an embodiment of the present invention for pricing a print job. The present invention is particularly well suited to digital printing jobs since the cost of ink is a substantial part of the cost of printing a document. In this example, a print job is provided (step 600). For example, a customer might electronically upload a document for

possible printing by the print service provider. Alternatively, a customer might simply inform the print service provider enough specific details regarding a print job to be able to price the print job. An approximate amount of ink associated with the print job is provided (step 602). The approximate amount of ink can be the exact amount of ink required by the print job or a rough estimate of the amount of ink required by the print job. An example of obtaining the approximate amount of ink associated with the print job is someone other than the print service provider providing the information to the print service provider, such as the customer informing the print service provider how much ink is required for the print job. Alternatively, the amount of ink needed for the print job can be estimated by an automated method such as the method described in conjunction with Figures 2-5.”.

3.1 Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The disclosure is objected to because of the following informalities:

A) as required by 37 CFR § 1.84(p(5)) and 37 CFR § 1.121(e) the specification lacks an explicit reference to the nature of:

(1) reference legend(s):

(a) 604 of fig. 6 as this figure is described in the paragraph located at page 17, lines 7-21, "Figure 6 is a flow diagram ... described in conjunction with Figures 2-5."

In this regard, it is noted that merely mentioning either a feature or a number with out mentioning the device or operation or number or feature relies on the drawing to provide support for the disclosure and not to aid in the understanding of the invention, as is the purpose of the drawings (37 CFR § 1.81(a,b)).

B) the following errors have been noted in the specification:

(1) as can be seen in figs. 4A & 4B, from the context of the paragraph located:

(a) at page 13, lines 14-21, "The total amount of ink for each color per document is then calculated (step 208). Alternatively, the total amount of ink for each color per page can be calculated, then add the total amount of ink per color per page for all the pages. Another approach is to consider the entire document a single large page and calculate the total amount of ink for each color per "page". The cost of printing the project is then determined (step 210). Details of calculating the total amount of ink per document and determining the cost of printing the project are later discussed in conjunction with Figures 4-6. A price is then displayed (step 212).", the reference to "Figures 4-6" should be -- Figures 4A, 4B, 5 and 6--.

(b) at page 17, lines 7-21, "Figure 6 is a flow diagram of a method according to an embodiment of the present invention for pricing a print job. The present invention is particularly well suited to digital printing jobs since the cost of ink is a substantial part of the cost of printing a document. In this example, a print job is provided (step 600). For example, a customer might electronically upload a document for possible printing by the print service provider. Alternatively, a customer

might simply inform the print service provider enough specific details regarding a print job to be able to price the print job. An approximate amount of ink associated with the print job is provided (step 602). The approximate amount of ink can be the exact amount of ink required by the print job or a rough estimate of the amount of ink required by the print job. An example of obtaining the approximate amount of ink associated with the print job is someone other than the print service provider providing the information to the print service provider, such as the customer informing the print service provider how much ink is required for the print job. Alternatively, the amount of ink needed for the print job can be estimated by an automated method such as the method described in conjunction with Figures 2-5.”, the reference to “Figures 2-5” should be –Figures 2, 3, 4A, 4B and 5--.

Appropriate correction is required.

5. The specification and drawings have not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification or drawings. Applicant should note the requirements of 37 CFR § 1.52, 37 CFR § 1.74, § 1.75, § 1.84(o,p(5)), § 1.121(a)-1.121(f) & § 1.121(h)-1.121(i).

6. Claims 5-8 & 10-22 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6.1 In regard to claims 5-8 & 10-22, although one of ordinary skill at the time of the invention would know how to accomplish each of the individual recited actions/functions from the language of these claims, since, there is no clear and definite interconnection between one or more of the recited limitations of these claims, one of ordinary skill could not determine from the language of these claims whether or not they are in fact making and/or using the claimed invention. In this regard it is noted that from the language of these claims it is vague, indefinite and unclear:

A) in regard to claims 5-7 & 14-16, and how the “cost multiplier” may be determined (claim 5) and used as recited in claims 6, 7, since the invention as recited in this claim has not determined, received or set forth either “an amount of money” or how many square inches may be covered by a color of ink so that the “currency per color inch<sup>2</sup>” may be determined.

B) in regard to claims 7 & 16, which of the “a first ink coverage value” or the “second ink coverage value” is used in the step of “dividing a cost of the ink cartridge by the ink coverage value of the ink cartridge”.

C) in regard to claims 7 & 16, and why a “second ink coverage value” is derived, since the invention as recited in these claims has already “provided a first ink coverage value”.

D) in regard to claims 7 & 16, and whether or not the “ink cartridge” associated with the “second ink coverage value” is the same color as the “color” associated with the provided “first ink coverage value”, since the invention as recited in these claims has already “provided a first ink coverage value” for that color ink cartridge.

E) in regard to claims 8 & 21, and for what purpose are the “instructions” in the memory provided to the processor, since the invention as recited in these claims fails to recite that these instructions actually control the processor or to what end tasks are the instructions provided to the processor, that is, what task or tasks are performed by the processor when the instructions in the memory are provided to the processor.

F) in regard to claims 10 & 22, and how the “amount of ink for a color” is estimated, since the invention as recited in these claims does not determine “a color” but converts the document into a “color space”.

G) in regard to claim 13, and how either “a total color value” or “the size of a pixel” or the number of “pixels” can be used in this claim, since the invention as recited in this claim has not determined, received or set forth any of these values so that they may be used as recited in this claim.

H) in regard to claim 19, and how an “amount of ink for each color associated with the document” may be estimated, since the invention as recited in this claim has

Art Unit: 3629

not determined, received or set forth any indication of "each color associated with a document".

I) in regard to claim 20, and how the "price" may be displaced, since the invention as recited in this claim has not determined, received or set forth any indication of the "price" so that it may be displayed.

6.2 Claims 10-20 & 22 are inoperative and therefore lack utility for the recited purpose of the disclosed and claimed invention, since:

A) in regard to claims 10 & 22, the utility of this claim as set forth in the preamble is "estimating a cost of a print job", however, it can not be seen how the steps of (1) converting a received document into a color space and (2) estimating an amount of an ink color would accomplish the utility of "estimating a cost of a print job". Hence this claim fails to have a utility for "estimating a cost of a print job".

For as the Court has specifically pointed out, claims must recite utility for the disclosed purpose of the invention, (General Electric Co. V. U.S., 198 U.S.P.Q. 65 (U.S. Court of Claims, 1978), Hanson v. Alpine Valley Ski Area 204 U.S.P.Q. 794 (District Court, E. D. Michigan, N. Div. 1978) and Banning v. Southwestern Bell Telephone C., 182 U.S.P.Q. 683

6.3 Claims not specifically mentioned above, inherit the defects of the base claim through dependency. For the above reason(s), applicant has failed to particularly point out what is regarded as the invention.

7. 35 U.S.C. § 101 reads as follows:

"Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title".

7.1 Claims 1-22 are rejected under 35 U.S.C. § 101 because the invention as claimed is directed to non-statutory subject matter.

7.1.1 The instant claims recite a system, (claims 8 & 21), and a method comprising a series of steps to be performed on a computer, (claims 1-7, 10-20), and a manufacture comprising program code to be executed by a computer, (claims 9 & 22), which have a disclosed practical application in the technological or useful arts. Further, the instant claims do not merely define

Art Unit: 3629

either a computer program, a data structure, non-functional descriptive material, (i.e. mere data) or a natural phenomenon.

7.1.2 In regard to claims 1-9, the invention as set forth in these claims merely describes:

A) in regard to claims 1-7, 9, determining a number representing the approximate price of the approximate amount of ink used in a print job;

B) in regard to claims 8 & 21 a processor and memory, where the processor is not controlled to determining a number representing the approximate price of the approximate amount of ink used in a print job and the instructions to an unknown purpose that are stored in the memory are not executed.

C) in regard to claims 10-20 & 22, performing the functions of (1) converting a received document into a color space and (2) estimating an amount of an ink color without "estimating a cost of a print job".

However, the process/system/manufacture as recited in these claims does not require the result of either the claim as a whole or the manipulations of data as recited in these claims be applied in any manner so as to be tangibly used in a concrete manner and hence to produce a useful concrete and tangible result, that is a concrete and tangible application with in the technological or useful arts.

7.1.3 It is further noted that applicant has not recited in these claims a specific process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, which is either:

A) altered or changed or modified by the invention recited in claims; or

B) utilizes the result of the invention recited in these claims; or

C) is operated or controlled by the result of the invention recited in these claims.

7.1.4 It is further noted in regard to claims 1-22, that as claimed applicant has not claimed:

A) pre computer processing, since the claims fail to recited that the data, which originates from an unknown source, is manipulated or transformed/changed before it is processed; or

B) post computer processing, since the claims fail to recited that the data which represents the result of the claimed manipulation, is neither manipulated nor used nor changed by any device after it has been processed; or

C) a practical use of the claimed invention by any physical system or device or method outside of a statement of the intended use of the claimed invention; or

D) process steps or physical acts/operations that would affect the internal operation of a computer/machine as were found to be statutory in either In re McIlroy 170 USPQ 31 (CCPA, 1971) or In re Waldbaum 173 USPQ 430 (CCPA, 1972); or

E) process steps or physical acts/operations that would be considered as going beyond the manipulation of “abstract ideas” as were found to be non-statutory in In re Warmerdam 31 USPQ2d 1754 (CAFC, 1994); or

F) a concrete and tangible practical application of either:

(1) the invention as a whole; or

(2) the final results of the manipulations/actions with in the technological or useful arts;

note In re Sarkar 200 USPQ 132 (CCPA, 1978) where the process step of “constructing said obstruction within the actual open channel at the specified adjusted location indicated by the mathematical model” was held to be so tenuous connected to the remaining process steps as to not be a process with in the scope of 35 U.S.C. § 101.

Hence, the invention of claims 1-22 is merely directed to an hypothetical mental exercise that manipulates an abstract idea of manipulating data/information to determine a number with out requiring the use of the determined number and hence are with out a claimed concrete and tangible practical application of the abstract idea, (note In re Beauregard 35 USPQ2d 1383 (CAFC 1995) and the associated claims of U.S. Patent 5,710,578; and State Street Bank & Trust Co. v. Signature Financial Group Inc. 47 USPQ2d 1596 (CAFC 1998)).

7.1.5 It is further noted that the type/nature of either the data or the calculated numbers does not affect the operation of the claimed invention and hence are considered to be non function descriptive material, (note In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983)).

Art Unit: 3629

7.1.6 In practical terms, claims define nonstatutory processes if they:

A) consist solely of mathematical operations without some claimed practical application (i.e., executing a “mathematical algorithm”); or

B) simply manipulate abstract ideas, e.g., a bid (Schrader, 22 F.3d at 293-94, 30 USPQ2d at 1458-59) or a bubble hierarchy (Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759),

without some claimed practical application of the mathematics or abstract idea.

7.1.7 In view of the above analysis claims 1-22, as a whole, are directed to an hypothetical mental exercise that merely manipulates mathematics or an abstract idea without a claimed concrete and tangible practical application of the mathematics or abstract idea, and hence are directed to non-statutory subject matter.

7.2 Claims 9 & 22 are rejected under 35 U.S.C. § 101 because the invention as claimed is directed to non-statutory subject matter.

7.2.1 The instant claims recite a system/device/manufacture, (claims 9 & 22), which has a disclosed practical application in the technological or useful arts, and which does not merely define either a computer program, a data structure, non-functional descriptive material, (i.e. mere data) or a natural phenomenon. Hence, the instant claims merely define device/manufacture that contains a data structure comprising series of steps or acts or functions or operations that as claimed could be but are not necessarily to be performed by a computer.

7.2.2 It is further noted that applicant has not recited a specific machine since the steps or acts or functions or operations recited in the claim are merely to illustrate the steps or acts or functions or operations of the instant invention since these steps or acts or functions or operations as claimed are not in fact implemented by a processor/computer. Hence, applicant envisions the invention as recited in claims 9 & 22 as a disembodied storage device, i.e. memory, that stores a computer program as a non-functional data structure. Such a disembodied storage device is not a specific machine because:

A) it is not associated with a computer in such a way as to cause the computer to operate in a specific manner, (note In re Beauregard 35 USPQ2d 1383 (CAFC 1995) and the associated claims of U.S. Patent 5,710,578); and

Art Unit: 3629

B) a memory device alone can not perform the functions recited within the claims.

Therefore, the recited disembodied storage device, which itself can not perform the functions recited within the claims as the invention, is inoperative and lacks utility for the purpose of the invention.

7.2.3 In view of the above, the invention recited in claims 9 & 22, merely describes an abstract idea of a disembodied storage device, i.e. memory, that stores a computer program as a non-functional data structure, since a disembodied storage device by itself can not produce a concrete and tangible result by performing the functions recited within the claims as the invention (State Street Bank & Trust Co. v. Signature Financial Group Inc. 47 USPQ2d 1596 (CAFC 1998)). Hence, claims 9 & 22 do not have a claimed practical application, since the disembodied storage device is inoperative and therefore lacks utility for the purpose of the invention.

7.2.4 Nonfunctional descriptive material cannot render nonobvious an invention that would have otherwise been obvious. Cf. *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983) (when descriptive material is not functionally related to the substrate, the descriptive material will not distinguish the invention from the prior art in terms of patentability). Common situations involving nonfunctional descriptive material are:

- a computer-readable storage medium that differs from the prior art solely with respect to nonfunctional descriptive material, such as music or a literary work, encoded on the medium;

- a computer that differs from the prior art solely with respect to nonfunctional descriptive material that cannot alter how the machine functions (i.e., the descriptive material does not reconfigure the computer), or

- a process that differs from the prior art only with respect to nonfunctional descriptive material that cannot alter how the process steps are to be performed to achieve the utility of the invention.

7.2.5 Hence, claims 9 & 22 are directed to non-statutory subject matter.

Art Unit: 3629

7.3 Claims 5-8 & 10-22 are rejected under 35 U.S.C. § 101 because the invention as claimed is directed to non-statutory subject matter.

7.3.1 As set forth by the Court in:

A) In re Musgrave 167 USPQ 280 at 289-290 (CCPA 1970), “We cannot agree with the Board that these claims (all the steps of which can be carried out by the disclosed apparatus) are directed to non-statutory processes merely because some or all of the steps therein can also be carried out in or with the aid of the human mind or because it may be necessary for one performing the process to think. All that is necessary, in our view, to make a sequence of operational steps a statutory “process” within 35 U.S.C. 101 is that it be in the technological arts so as to be in consonance with the Constitutional purpose to promote the progress of “useful arts.” Cons. Art. 1, sec. 8.”, {emphasis added}; and

B) In re Sarkar 100 USPQ 132 @ 136-137 (CCPA 1978), echoing the Board of Appeals stated in regard to claim 14 “14. A method of locating an obstruction in an open channel to affect flow in a predetermined manner comprising:

a) obtaining the dimensions of said obstruction which affect the parameters of flow;

b) constructing a mathematical model of at least that portion of the open channel in which said obstruction is to be located in accordance with the method of claim 1 using those dimensions obtained in step (a) above;

c) adjusting the location of said obstruction within said mathematical model until the desired effect upon flow is obtained in said model; and thereafter

d) constructing said obstruction within the actual open channel at the specified adjusted location indicated by the mathematical model.”;

and “Concerning claims 14-39 and the significance of “post-solution activity,” like building a bridge or dam, the board concluded: While it is true that the final step in each of these claims makes reference to the mathematical result achieved by performing the prior recited steps, we consider the connection to be so tenuous that the several steps recited in each claim when considered as a whole do not constitute a proper method under the statute.”, {emphasis added}.

7.3.2 Further, it is noted in regard to claims 14-39 of Sarkar, although step (d) of claim 14 of Sarkar references the result of step (c) of claim 14 of Sarkar it is clear from the language of step (c) of claim 14 of Sarkar that multiple adjustments to the location of the obstruction are required to be made until a location with the desired effect has been determined. Hence, the reference to constructing the obstruction at the “specified adjusted location” in step (d) of claim 14 of Sarkar is vague, indefinite and unclear in regard to which one of the possible multiple adjusted locations of the obstruction that were used during step (c) of claim 14 of Sarkar would be used when constructing the obstruction as required by step (d) of Sarkar. Therefore, without a clear connection between step (d) of Sarkar and the remaining steps of claim 14 of Sarkar, the Board of Appeals and the Court held that these claims were not a process with in the meaning of process as used in 35 U.S.C. § 101 and hence were directed to non statutory subject matter.

7.3.3 As can be seen from claims 5-8 & 10-21, these claims are directed to a series of devices for performing various functions or steps/actions/functions, which as set forth above in regard to the rejection of claims 5-8 & 10-21 under 35 U.S.C. § 112 2<sup>nd</sup> paragraph, are not clearly and definitely interconnected to one another and therefore do not provide an operative useful machine/system or method/process with in the meaning of machine or process as used in 35 U.S.C. § 101.

7.3.4 Further on regard to the computer useable/readable medium of claim 22, the recited limitations are not clearly and definitely interconnected to one another and a device to execute the program code/instructions on the media so as to provide a useful operative and useful manufacture with in the meaning of machine or process as used in 35 U.S.C. § 101.

Art Unit: 3629

7.4 Claims 10-20 & 22 are rejected under 35 U.S.C. § 101 because the invention as claimed is directed to non-statutory subject matter, since they lack substantial and practical utility.

A) it is respectfully noted that claims 10-20 & 22 lack for estimating a price as set forth above in the rejection of these claims under 35 U.S.C. § 112 2<sup>nd</sup> paragraph as set forth above.

In view of the above, it is considered that the invention of claims 10-20 & 22 lack substantial and practical utility.

7.5 Claims 5-8 & 10-22 are rejected under 35 U.S.C. § 101 because the invention as claimed is directed to non-statutory subject matter, since:

A) in regard to claims 5-8 & 10-22, these claims fail to comply with the "requirements this title, namely 35 U.S.C. § 112 2<sup>nd</sup> paragraph as set forth above.

B) in regard to claims {fill in}, these claims fail to comply with the "requirements this title, namely 35 U.S.C. § 102 as set forth below.

C) in regard to claims {fill in}, these claims fail to comply with the "requirements this title, namely 35 U.S.C. § 103 as set forth below.

8. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

(c) Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Art Unit: 3629

8.1 Claims 1-22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Farrell (5,383,129) in view of Barry et al (2005/0007621).

8.1.1 In regard to claims 1-22, Farrell ('129) teaches a computerized printing system that under the control of the instructions of a program stored in memory determines the cost of the materials required for a print job from the specifications of the print job. Where the specifications indicate the materials for the print job and include the types of paper and ink/toner to be used for the print job. Based on these specifications, the determined require materials and the cost/price for each of the required materials the system of Farrell ('129) determines the cost of the print job.

8.1.2 Farrell ('129) does not explicitly estimate the amount of ink for a print job, however, as taught by Barry et al ('621) the amount of ink/toner that is required for a print job may be estimated based on the toner density of the image before the print job is started. Since the amount of the toner/ink that is used during a print job would affect the cost of the job as taught by either Farrell ('129) or Barry et al ('621), it would have been obvious to one of ordinary skill at the time of the invention that the cost estimating system of Farrell ('129) could be modified to consider the density of the toner/ink require to print the job when estimating the cost of the print job.

9. The examiner ahs cited prior art of interest, for example:

A) Sugawara et al (4,233,663) discloses that the optical density of an image can be used to determine the color density require to reproduce the image.

B) either Hoffman (4,422,765) or Birdbaum (5,204,669) discloses that the rate or ink/toner use is dependent on the density of the image being reproduced.

C) Stone discloses that printers may be compared based on the cost per page.

D) Motamed (WO 99/36835) which discloses that the size and density of the printed dots/pixels can be used to determine toner usage.

E) Wetchler et al (6,196,663) disclose that the rate of use of toner on a page may be used to determine the amount remaining toner.

F) Weaver et al (2001/0013939) discloses that the toner mass per unit area can be used to determine the cost of a print job before the print job is started.

Art Unit: 3629

10. The shorten statutory period of response is set to expire 3 (three) months from the mailing date of this Office action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward Cosimano whose telephone number is (703) 305-9783. The examiner can normally be reached Monday through Thursday from 7:30am to 6:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss, can be reached on (703)-308-2702. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1113.

11.1 The fax phone number for UNOFFICIAL/DRAFT FAXES is (703) 746-7240.

11.2 The fax phone number for OFFICIAL FAXES is (703) 872-9306.

1.3 The fax phone number for AFTER FINAL FAXES is (703) 872-9306.

02/04/05



Edward R. Cosimano  
Primary Examiner A.U. 3629